

NATURAL RESOURCES CONSERVATION SERVICE
PRACTICE DOCUMENTATION MANUAL
MICROIRRIGATION
441

441 – STEP 1. INITIAL EVALUATIONS**PURPOSE**

The purpose of this step is to determine the landowner's desire to construct a Microirrigation System in a predetermined location for the intended purpose(s) (See NRCS Practice Standard 441).

The landowner must be interviewed to determine the purpose and needs for a Microirrigation System. Considerations will include the landowner goals and objectives, existing condition and effects of this practice on existing soil, water, air, plant, animal and human resources. A discussion of NRCS Microirrigation System standards and specifications should also take place. Role of the landowner and the person assisting with Microirrigation System planning and construction should also be discussed. Additional pertinent questions should be asked on a site-specific basis.

441 – STEP 2. INVESTIGATIONS, SURVEYS, AND INVENTORIES**PURPOSE**

The purpose of this step is to identify the mandatory preliminary resource inventory and operations that are required before a Microirrigation System can be planned and installed. Resource inventories will include all data and information needed to make informed decisions in the planning and construction of a Microirrigation System and any follow-up management needs. Appropriate resource inventories could include soils, topography, crop (s) to be grown, water resources, and all physical features such as existing fencing, roads, water wells, natural barriers, ditches, and existing irrigation systems etc that might have an effect on planning of the Microirrigation System. Adjacent land uses and resources that would be affected by Microirrigation System construction should also be considered. Identify map resources needed such as the proper USGS 7.5 minute quadrangle sheet, soils, and road maps as well as aerial photography. Also

include identifying all needed utility clearances, archeological clearances (See NRCS Conservation Practice Job Sheet 441, ENV-1 Environmental Assessment, and Resource Inventory Checklist).

441 – STEP 3. PRACTICE DESIGN**I. PURPOSE**

The purpose of this step is to develop a Microirrigation System design.

This practice will be designed in accordance with all federal, state and local laws and ordinances.

Microirrigation Systems shall consist of acceptable pipe design and layout to distribute the water in a uniform manner for the intended life of the practice.

Resource inventories, local conditions and the intended use will need to be assessed for the proposed Microirrigation System design and location.

A Microirrigation System design will be developed with the client that meets the intended goals and objectives. All materials shall be of high quality. All appropriate job sheets, maps and reports must be developed with landowners input, review and concurrence (See Practice Standard, Specification and Job Sheet 441).

II. SITING

The purpose of this step is to insure that the Microirrigation System is properly located and the client fully understands where the Microirrigation System is to be located.

Care should be given to make sure the planned Microirrigation System locations are known by all involved.

III. MATERIALS/EQUIPMENT

The purpose of this item is to insure an understanding of the materials/equipment used to construct a Microirrigation System. Further knowledge would include the types of pipe materials, Microirrigation System installation and repair equipment. Appropriate standards, job sheets and

expectations that include the types and number of each type of materials/equipment will need to be provided to the landowner and all those involved in the planning and construction of the Microirrigation System.

441 – STEP 4. PLANS AND SPECIFICATIONS

PURPOSE

The purpose of this step is to document and describe each component of the Microirrigation System plan, which includes step by step instructions to be used while installing a Microirrigation System.

This will include the documentation of all components described in Microirrigation System Job Sheet 441. Additional reference material should be included as needed and appropriate.

The landowner must be provided with a complete Microirrigation System design and plan in the form of a Conservation Plan, Plan Map, and NRCS Microirrigation System Job Sheet 441 in order to document the Microirrigation System design and location. Items not described in Job Sheet 441, that are essential for location and construction of the Microirrigation System, will be added to the Job sheet.

441 - STEP 5. MANAGEMENT AND OPERATION, MAINTENANCE

PURPOSE

The purpose of this step is to assure that proper management, operation and maintenance is completed at the Microirrigation System site (See NRCS Practice Standard and Specification 441.

This requires a familiarity with the design and correct operation of the installed Microirrigation System in order to operate the Microirrigation System in a proper and safe fashion. Periodic operations and maintenance schedules should be implemented.

These measures should be discussed with and understood by the landowner.

441 – STEP 6. COMPLIANCE OR SPOT CHECKING

I. PURPOSE

The purpose of this step is to determine that all work has been completed to the standards required by the Natural Resources Conservation Service.

All completed NRCS forms should be collected from the landowner and submitted to the appropriate persons. (See NRCS Practice Standard, Specification, and Job Sheet 441, NM-ENV-1 Environmental Assessment, and Resource Inventory Checklist).

II. DOCUMENTS

Copies of all completed job sheets and associated work sheets should be submitted to the Natural Resources Conservation Service representative within 10 working days of completion of the Microirrigation System. This includes the Microirrigation System Practice Requirements as outlined in Job Sheet for 441 and any other job sheets that may be needed for this practice to meet the intended goals and objectives.